

# IKATES, s.r.o. – Laboratory for glass and building products testing



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## TEST REPORT

No. : EN 1279-4

Test item : **Joints with hot-melt NOVAMELT B-29  
- adhesion tests according to ČSN EN 1279-4**

Client (address): HERMETICS OOD,  
Pere Toshev 10, Petrich, Bulgaria

Producer (address): HERMETICS OOD,  
Pere Toshev 10, Petrich, Bulgaria

Place of test performance : testing laboratory IKATES, s.r.o., Teplice

Date of sample receiving : 2015-11-25

Date of test performance : 2015-12-10 to 2016-01-04

Date of issue : 2016-01-12

Number of pages : 4 + annex

Page No. : 1

Manager of testing laboratory : Jiří Stránský



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No. : 297A / 2015	Number of pages : 4
	Page No. : 2

**Normative foundations :**

ČSN EN 1279-4 (2003): Glass in building – Insulating glass units – Part 4: Methods of test for the physical attributes of edge seals

**Sampling :**

To the testing of seal adhesion and cohesion strength were supplied 32 pcs. of joints from hot-melt NOVAMELT B-29.

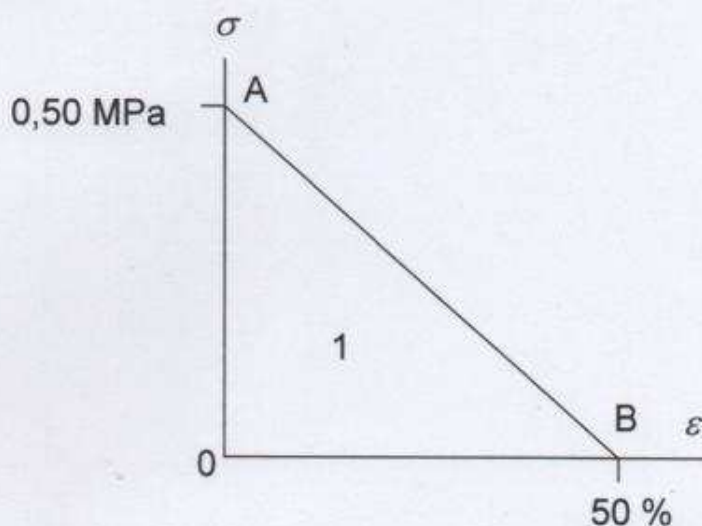
Note: Test pieces were chosen at random.

**Metrological provision of tests :**

Ageing was performed using of hot-air sterilizer and UV-radiation wall (Ultravitalux). Test specimens were loaded using of universal testing machine Labtest with metrological traceability to the producers etalon.

**Test results :**

**1. Edge seal strength test**



No breakage allowed within the area 0AB (No.1 on the figure)



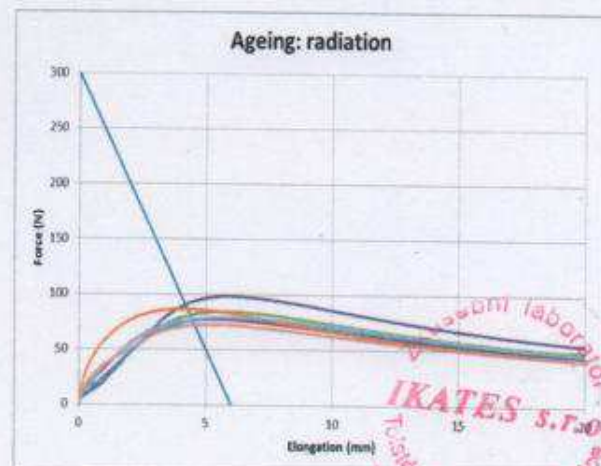
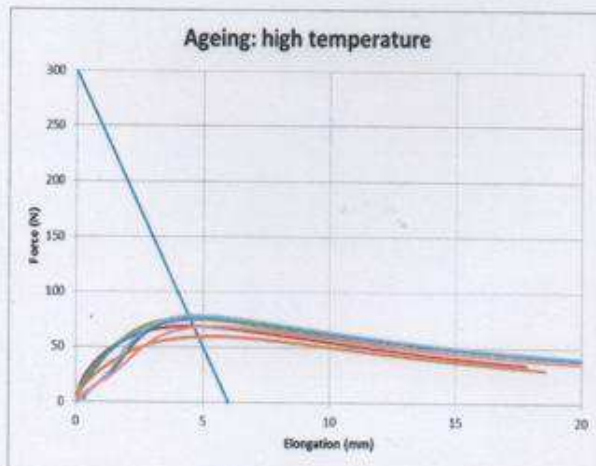
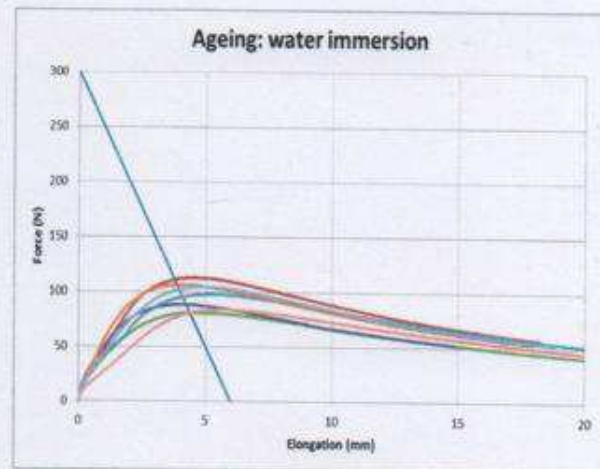
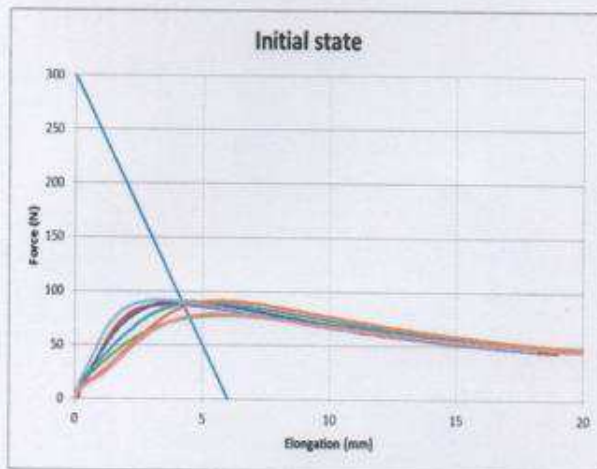
No. : 297A / 2015

Number of pages : 4

Page No. : 3

test / specimen	$\sigma_x$ (MPa) / $\epsilon$ (%)						
	1	2	3	4	5	6	7
initial state	0,15	0,13	0,15	0,15	0,14	0,15	0,13
	35,4	37,4	34,9	35,2	35,7	34,9	37,2
after water immersion	0,19	0,14	0,15	0,16	0,18	0,17	0,13
	31,5	36,5	35,3	34,2	32,3	33,0	36,6
after heat exposure	0,11	0,13	0,13	0,13	0,10	0,13	0,11
	38,5	37,3	37,2	37,4	40,1	36,9	38,7
after UV exposure	0,13	0,14	0,15	0,13	0,14	0,13	0,12
	37,2	36,5	34,9	37,3	35,5	37,1	38,0

Note: The values correspond to intersection of curves with line AB. According to requirements of ČSN EN 1279-4 are the minimum and the maximum values of set excepted from evaluation.



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No. : 297A / 2015	Number of pages : 4
	Page No. : 4

**Statement :** Test results, given in this report, apply only to the tested items and do not replace other documents, e.g. administrative characters, issued from other bodies, according to particular regulations. The official version is in Czech Language.

**Distribution list :**

2 x HERMETICS OOD

1 x Laboratory for glass and building products testing IKATES, s.r.o. (archive)

**Tests were performed by :**

  
  
**Jiří Šnajdr, Jiří Stránský**

**Report was performed by :**

**For correctness and validity of report is responsible :**

  
**Jiří Stránský**



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**Summary report No. 297A/2015 Date: 2016-01-12**

**Insulating glass units – Seal properties results according to EN 1279-4**

For details, see the test report 297A/2015

Company (Client): HERMETICS OOD,  
 Pere Toshev 10, Petrich, Bulgaria

Plant (Producer) : HERMETICS OOD,  
 Pere Toshev 10, Petrich, Bulgaria

Sealant specification: hot-melt NOVAMELT B-29

Seal strength test:	At intersection with line A-B:		Type of failure observed				
	Average stress $\sigma_{av}$ (MPa)	Average extension $\epsilon_{av}$ (%)	C = cohesion A = adhesion G = glass breakage				
			1	2	3	4	5
Initial cure	0,14	35,7	C	C	C	C	C
After water immersion	0,16	34,2	C	C	C	C	C
After heating at 60°C	0,12	37,8	C	C	C	C	C
After UV radiation	0,13	36,7	C	C	C	C	C

Moisture vapour transmission rate: N/A

Gas permeation rate: N/A

Conclusion of seal strength test:

The sealant conforms to the test criteria

YES

.....  
 Jiří Stránský  
 manager of testing laboratory

end of the test report

